

## **TENDER INVITATION NOTICE**

**Department of Chemistry, University of Kerala, Kariavattom,**

**Thiruvananthapuram-695581**

**Email: [chem12uniker@gmail.com](mailto:chem12uniker@gmail.com)**

**No. DC/ST/20/Eq/2025-26 dated 31/12/2025**

Sealed tenders are invited from the authorized dealers for supply, installation and commissioning of a CO<sub>2</sub> Incubator in the Department of Chemistry, University of Kerala, Kariavattom, Thiruvananthapuram-695581 in connection with the implementation of the research project “Establishment of Microfluidic Devices Research Laboratory” proposed under the State Plan Grant for the year 2025-26.

**Last date of submission of Quotation-19/01/2026**

### **CO<sub>2</sub> incubator - System Overview**

A CO<sub>2</sub> incubator required to provide a precisely controlled environment of temperature, CO<sub>2</sub> concentration, and humidity to maintain physiological conditions necessary for cell culture. Adaptable for cell-based microfluidic and organ-on-chip studies, where live cells are cultured within microscale channels and are highly sensitive to environmental fluctuations. Envisaged for continuous cell culture, long-term perfusion experiments, and real-time monitoring under physiologically relevant conditions, supporting applications such as drug screening, disease modelling, and biomarker studies.

### **Technical Specifications**

#### **1 - General Requirements**

<b>1.1</b>	<b>Control &amp; Range</b>	<b>±0.1°C@ 37°C,5°C above ambient to 50°C</b>
<b>1.2</b>	<b>Heating Method</b>	<b>Air jacket</b>
<b>1.3</b>	<b>Uniformity</b>	<b>±0.3°C @ 37°C or better</b>
<b>1.4</b>	<b>Alarm Setting</b>	<b>Customized, Upper limit: (T+0.1) ~ (T+5.0); Lower limit:(T-0.1) ~ (T-5.0) or better</b>
<b>1.5</b>	<b>Sensor</b>	<b>Pt1000 Platinum thermistor</b>
<b>1.6</b>	<b>Controller</b>	<b>PID</b>
<b>1.7</b>	<b>Readability &amp; Setability</b>	<b>0.1°C</b>
<b>1.8</b>	<b>Sterilization Method</b>	<b>140°C dry heat sterilization</b>

## 2- CO<sub>2</sub> Concentration

2.1	Control & Range	±0.1%@5%,0-20%
2.2	Sensor	Heat-resistant infrared (IR) sensor
2.3	Inlet Pressure	1.0 bar (recommended)
2.4	Uniformity	±0.3%
2.5	Readability & Setability	0.10%
2.6	Alarm Setting	Customized, Upper limit: (C+0.1) ~ (C+1.0); Lower limit: (C-0.1) ~ (C-1.0)

## 3 - Humidity

3.1	Water Pond Volume	~4 L or better
3.2	Display	1% RH

## 4-Shelves

4.1	Dimensions	Approx. 40×46 cm
4.2	Surface Area	Approx. 250 cm <sup>2</sup>
4.3	Number (Standard & Max)	10

## 5-Size

5.1	Interior Volume	~200 L
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## 6.Warranty for the equipment, control unit and display unit:

A comprehensive warranty of minimum of three years from the date of installation should be provided. During the warranty period, there should be two mandatory service visits per year. On-site service with required spares/consumables shall be ensured during the warranty period.

\*Sealed tenders should reach The Assistant Professor and Head, Department of Chemistry, University of Kerala, Kariavattom, Thiruvananthapuram-695581 on or before 19/01/2026.

The cost of tender form and EMD(Earnest Money Deposit) should be submitted as Demand Draft(DD) issued from a Nationalised & Scheduled Commercial Bank, drawn in favour of the Assistant Professor and Head, Department of Chemistry payable at SBI, Kariavattom Campus(IFSC code SBIN0070043).

Cost of Tender Form	INR 1180/-
Earnest Money Deposit	INR 5000/-

The cost of tender form will not be refunded and the separate DD towards the cost of the tender form and the EMD should be submitted. The compliance statement should be submitted that includes all parameters in specification, as detailed in Tender Document.

#### **General Terms and Conditions:**

1. Quotes should be inclusive of cost, freight, taxes etc. and should be delivered at the Department of Chemistry, University of Kerala, Kariavattom.
2. Incomplete & conditional quotations and quotations received after the due date will be summarily rejected without assigning any reasons thereof.
3. The undersigned reserves the right to reject or accept the quotation without assigning any reason.
4. **Installation and Commissioning:** The items shall be installed and commissioned at the Department of Chemistry, University of Kerala, Kariavattom Campus. The supplier should bear all incidental expenses.
5. **Payment:** The University will release the payment only after inspecting the equipment and satisfy that the supply is as per the requirements. The payment will be made after successful completion of the supply and producing invoice in duplicate.
6. **Validity of tender:** Tender submitted shall remain valid at least for 90 days from the date of opening the tender. Validity beyond three months from the date of opening of the tender shall be by mutual consent.
7. The model number, make, and a printed literature of the product shall submit positively.
8. A signed compliance matrix (on specifications and conditions) should be submitted along with the quote.
9. In case of the dispute arises; the decision of University authority shall be final and binding on bidders.
10. General rules relating to the purchase of materials/equipment will also applicable to this quotation.
11. Those who are interested should send their **bid along with the Tender document (sealed and signed in each page), separate DD towards the cost of the tender form and the EMD, Compliance statement and the technical specification/brochure** in a sealed cover superscribed with “**Quotation for Ref. No: (.....) Equipment Name: (.....)**” and addressed to **The Assistant Professor and Head, Department of Chemistry, University of Kerala, Kariavattom Campus, Thiruvananthapuram-695581, Kerala** on or before **19/01/2026**. **The tenders will be opened at the Department of Chemistry at 3.30 PM on the same day in the presence of vendors then present.**

-Sd-  
The Head  
Department of Chemistry  
University of Kerala

